

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DAVID P. FERGUSON, PETER M. MADDOCKS,  
and DOUGLA WESLEY RAUENZAHN

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Appeal 2007-0839  
Application 09/679,691  
Technology Center 2100

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Decided: July 24, 2007

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*Before:* ALLEN R. MACDONALD, JAY P. LUCAS,  
and JOHN A. JEFFERY, *Administrative Patent Judges.*

MACDONALD, *Administrative Patent Judge.*

DECISION ON APPEAL

REVERSED

## STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1-38 entered November 16, 2005. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants invented a system and method with which peripheral devices connected to various hosts of a network can be detected from a central point. (Specification 1).

Independent claim 1 under appeal reads as follow:

1. A method for detecting devices connected to a network, comprising:

sending a scan request to a remote command process running on a remote network host;

scanning the network host with the remote command process to identify peripheral devices that are directly connected to the host; and

receiving a response to the scan request from the remote command process that indicates what devices are connected to the network host.

The Examiner rejected claims 1-38 under 35 U.S.C. § 102(e).

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Goshey                    US 6,101,555            Aug. 8, 2000

This Board cites the following additional prior art as relevant to the claims on appeal:

Stuber                    US 5,659,690            Aug. 19, 1997

Romano                    US 6,839,757            Jan. 4, 2005

Appellants contend that the claimed subject matter is not anticipated. More specifically, Appellants contend that although the reference somehow determines what remote “peripheral devices” are connected to a computer, the reference is silent as to how that determination is performed. (Reply Br. 5-6)<sup>1</sup>. The Examiner contends that Goshey teaches that “the scanLAN server program identifies host adapters and the peripheral devices connected [to the] server . . .” using a get-support-info command which “meets the scope of the claimed limitation . . . [of] sending a scan request to a remote command process running on a remote network host.” (Answer 12)<sup>2</sup>.

We reverse.

#### ISSUE

Have Appellants shown that the Examiner has failed to establish that Goshey teaches “scanning . . . to identify peripheral devices that are connected to the host” as required by claims 1-38?

#### FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

##### *Appellants’ Invention*

1. Appellants invented a system and method with which peripheral devices connected to various hosts of a network can be detected from a central point. (Spec. 1:6-7).

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<sup>1</sup> Filed Nov. 3, 2006, fully replacing all prior Briefs.

<sup>2</sup> Entered Oct. 3, 2006.

2. As shown in Fig. 1, the device detection system 100 comprises a controller process (CP) 102, a remote command process (RCP) 104, and a host lookup process (HLP) 106. (Spec. 4:7-9).

3. A single host of the network can, optionally, comprise each of the CP 102, RCP 104, and HLP 106, if desired. (Spec. 8:4-5).

4. These processes can be implemented in software and/or hardware. (Spec. 4:10).

5. These processes can be provided in one or more hosts of the network. (Spec. 4:11).

*Admitted prior art*

6. Normally, many or all hosts comprise devices that are directly connected to the hosts. (Spec. 1:12-13).

7. Such devices can include, for example, disk drives, tape drives, tape libraries, modems, *etc.* (Spec. 1:13-14).

8. It is known to determine the existence of such devices by manually scanning each host of the network separately. (Spec. 2:2-3).

*Goshey*

9. Goshey describes a system and method with which a user can detect *local* host adapters and peripheral devices connected to a computer by performing a scan using a SCSI Explorer™ interrogator software program. (col. 4, ll. 28-34).

10. Goshey further describes a system and method with which *remote* host adapters and peripheral devices connected to various hosts of a

network can be detected from a central point using the SCSI Explorer™ interrogator software program in combination with ScanLan software code. (col. 5, ll. 33-48).

11. Specifically, Goshey states (col. 5, ll. 39-44):

[W]hen a user of the computer 112d uses the interrogator 204 to determine what peripheral devices and host adapters are connected to computer 112d, the SCSI device list 206 will also include the peripheral devices that are connected to computer 112b, as if they were physically connected to computer 112d.

12. The peripheral devices include scanners, tape drives, CD-R drives, and other SCSI devices that are typically not assigned a drive letter. (col. 5, ll. 28-30).

13. Goshey describes (col. 8, ll. 54-58) that (*emphasis* added):

Although there are other functions performed by the WNASPI32.DLL engine 305, the two main functions 502 used in communicating to a *remote peripheral device* include a "get ASPI 32 support info" function, and a "send ASPI 32 command" function.

14. Goshey describes (col. 9, ll. 6-10) that (*emphasis* added):

As shown [in Fig. 5A], a first function includes a "get support info attachment" function 504a, and a "send command attachment" function 504b. The "get support info attachment" function 504a is used to *find all host adapters* that are connected to a particular network.

15. Goshey describes (col. 9, ll. 20-22) that (*emphasis* added):

Once at the ScanLAN DLL 308, the "get support info attachment" function 504a determines *the location of all host adapters* in the network.

16. Goshey describes (col. 9, ll. 56-60) that (*emphasis added*):

Once connection is complete to all ScanLAN servers in operation 514, the method will proceed to an operation 520. In operation 520, the *local and the remote host adapter* count will be returned and the method will end.

#### PRINCIPLES OF LAW

On appeal, Appellants bear the burden of showing that the Examiner has not established a legally sufficient basis for anticipation based on the Goshey patent.

Appellants may sustain this burden by showing that the prior art reference relied upon by the Examiner fails to disclose an element of the claim. It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. *See In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

#### ANALYSIS

Goshey teaches automated scanning to identify both host adapters and peripheral devices connected a host (FF 9-11); that peripheral devices include tape drives (FF 12); that a “get support info” function is used to determine the location of all host adapters in the network (FF 14-16); and that a “get support info” function is also used to communicate with remote peripheral devices (FF 13).

Although Goshey explicitly describes automatically determining the location of both host adapters and peripheral devices and the specifics of

how to automatically locate host adapters, Goshey is silent as to the specific process used to locate peripheral devices. Goshey fails to even state that the host adapter locating process is also exemplary of the process to locate peripheral devices. Thus, there is an extremely small gap between the claimed invention and the teaching of Goshey, but a gap nonetheless.

Appellants have correctly pointed out that the gap. Accordingly, we must conclude that the Examiner has not shown that all the claimed elements are described in Goshey as required by 35 U.S.C. § 102(e).

On the record before us, it follows that the Examiner erred in rejecting claim 1 under § 102(e). Since claims 2-38 are narrower than claim 1, it also follows that those claims were not properly rejected under § 102(e) over Goshey.

#### NEW GROUNDS OF REJECTION UNDER 35 U.S.C. § 103

##### *Principles of Law*

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*,

383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test.

In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248 [(1850)].” *KSR* at 11 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* The Court explained:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*Id.* at 1740, 82 USPQ2d at 1396. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

Under this framework, once an Examiner demonstrates that the elements are known in the prior art and that one of ordinary skill could combine the elements as claimed by known methods and would recognize that the capabilities or functions of the combination are predictable, then the Examiner has made a *prima facie* case that the claimed subject matter is likely to be obvious. The burden then shifts to the Appellant to show that the Examiner erred in these findings or to provide other evidence to show that the claimed subject matter would have been nonobvious.

The Supreme Court made clear that “[f]ollowing these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *Id.* In those cases, the Court explained, “it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41, 82 USPQ2d at 1396. Where it is necessary, that analysis should be made explicit. *Id.* (citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements;

instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, the Supreme Court rejected as too rigid an approach in resolving questions of obviousness the application of a test whereby claimed subject matter “is only proved obvious if ‘some motivation or suggestion to combine the prior art teachings’ can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art.” *Id.* at 1734, 82 USPQ2d at 1391. The Court stated that “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741, 82 USPQ2d at 1396.

*Rejection of claims 1 and 35*

We reject reissue claims 1 and 35 under 35 U.S.C. § 103(a), using our authority under 37 C.F.R. § 41.50(b).

We consider Goshey to be indicative of the level of skill in the art. We also cite Stuber (US 5,659,690), assigned to the same assignee as Goshey, as evidence of the level of skill in the art. Stuber contains approximately 200 pages of drawings and text and another 500 pages of microfiche describing the operation of host adapter systems.

As discussed above, Goshey teaches automated scanning to identify both host adapters and peripheral devices connected a host (FF 9-11); that peripheral devices include tape drives (FF 12); that a “get support info” function is used to determine the location of all host adapters in the network

(FF 14-15); and that a “get support info” function is also used to communicate with remote peripheral devices (FF 13). Although Goshey explicitly describes automatically determining the location of both host adapters and peripheral devices and the specifics of how to automatically locate host adapters, Goshey is silent as to the specific process used to locate peripheral devices.

Thus, Goshey teaches every element of the device of claims 1 and 35 but for the specific process used to locate peripheral devices, the sole difference between Appellants’ claims 1 and 35 and the teachings of Goshey is the use of Goshey’s automatic scanning process to locate host adapters (FF 14-16) in place of Goshey’s unspecified automatic process used to locate peripheral devices (FF 9-11 and 13). In that regard, Goshey shows that it was known in the art at the time of the invention to use a scanning process to locate certain devices (host adapters). We conclude that it would have been obvious to use the same process to locate other devices (peripheral devices) in the same art.

*Claims 2-34 and 36-38*

The Board of Patent Appeals and Interferences is a review body, rather than a place of initial examination. We have made a rejection above under 37 C.F.R. § 41.50(b). However, we have not reviewed claims 2-34 and 36-38 to the extent necessary to determine whether these claims are patentable under § 103 over Goshey and other patents cited in the record. We leave it to the instant Examiner to determine the appropriateness of any further § 103 rejections based on these references.

*37 C.F.R. § 41.50(b)*

37 C.F.R. § 41.50(b) provides that, “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the Appellants, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 C.F.R. § 1.197(b)) as to the rejected claims:

- (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner ...
- (2) *Request rehearing.* Request that the proceeding be reheard under 37 C.F.R. § 41.52 by the Board upon the same record ...

**CONCLUSIONS OF LAW**

- (1) Appellants have established that the Examiner erred in rejecting claims 1-38 as being unpatentable under 35 U.S.C. § 102(e) over Goshey.
- (2) On this record, claims 2-34 and 36-38 have not been shown to be unpatentable.
- (3) Claims 1 and 35 are not patentable.
- (4) Since we have entered a new rejection, our decision is not a final agency action.

Appeal 2007-0839  
Application 09/679,691

## DECISION

The Examiner's rejection of claims 1-38 is Reversed.  
We reject reissue claims 1 and 35 under 35 U.S.C. § 103(a).  
No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

REVERSED  
37 C.F.R. § 41.50(b)

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